

CLAIMS

1. A method for producing an acrylamide polymer comprising steps of: hydrating acrylonitrile containing oxazole at a concentration of 5 mg/kg or less and hydrogen cyanide at a concentration of 1 mg/kg or less by an enzymatic method to yield acrylamide; and polymerizing monomers containing the acrylamide.
2. The method for producing an acrylamide polymer according to claim 1, wherein, in a reaction step of hydrating acrylonitrile using an enzymatic method, the reaction is carried out until the concentration of acrylamide generated in a reaction solution becomes 30% by mass or more.
3. The method for producing an acrylamide polymer according to claim 1 or 2, wherein the enzymatic method is carried out using microbial cells as catalysts.
4. An acrylamide polymer obtained by hydrating acrylonitrile containing oxazole at a concentration of 5 mg/kg or less and hydrogen cyanide at a concentration of 1 mg/kg or less by an enzymatic method to yield acrylamide, and polymerizing monomers containing acrylamide.